

| TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma |          |          |  |                       |                          |                         |
|---|----------|----------|--|-----------------------|--------------------------|-------------------------|
| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
| 12604   | 0.049016 | seoc6182 | TAF4b RNA polymerase II, TATA box binding protein (TBP)-associated factor, 105kDa (TAF4B), mRNA  | XM_290809             | XP_290809                | 1.28                    |
| 2397  | 0.049016 | fcr4012  | proteasome (prosome, macropain) 26S subunit, non-ATPase, 8 (PSMD8), mRNA /cds=(71,844) /gb=NM_002812 /gi=4506232 /ug=Hs.78466 /len=928   | NM_002812             | NP_002803                | 0.84                    |
| 14055   | 0.049016 | ncr3465  | hypothetical protein FLJ20255 (FLJ20255), mRNA /cds=(146,1090) /gb=NM_017728 /gi=8923229 /ug=Hs.15797 /len=1769  | NM_017728             | NP_060198                | 0.82                    |
| 2870  | 0.049016 | seob3493 | threonyl-tRNA synthetase (TARS), mRNA /cds=(135,2270) /gb=NM_152295 /gi=25054078 /ug=Hs.84131 /len=2662  | NM_152295             | NP_689508                | 0.84                    |
| 2757  | 0.049016 | miob6188 | selenoprotein W, 1 (SEPW1), mRNA /cds=(62,325) /gb=NM_003009 /gi=4506886 /ug=Hs.14231 /len=758   | NM_003009             | NP_003000                | 0.87                    |
| 12660   | 0.049016 | ncr6190  | clone IMAGE:5168526, mRNA /gb=BC031641 /gi=22749594 /ug=Hs.61957 /len=2134   | BC031641              |                          | 1.43                    |
| 6842  | 0.049016 | ncrc2128 | protein phosphatase 1, regulatory (inhibitor) subunit 12A (PPP1R12A), mRNA /cds=(1,3093) /gb=NM_002480 /gi=4505316 /ug=Hs.16533 /len=4613  | NM_002480             | NP_002471                | 1.09                    |
| 11151   | 0.049013 | seoc2272 | clone IMAGE:5277612, mRNA /gb=BC043650 /gi=27693174 /ug=Hs.378059 /len=3723  | BC043650              | NP_203132                | 0.65                    |
| 12745   | 0.049003 | ncrc0496 | clone IMAGE:5298223, mRNA /gb=BC041882 /gi=27469431 /ug=Hs.97179 /len=1694   | BC041882              |                          | 1.45                    |
| 8137  | 0.049003 | mioc3300 | cartilage acidic protein 1 (CRTAC1), mRNA /cds=(319,1575) /gb=NM_018058 /gi=8922351 /ug=Hs.326444 /len=2178  | NM_018058             | NP_060528                | 0.72                    |
| 10833   | 0.04655  | ncrb7859 | DKFZp761M167_s1 761 (synonym: hamy2) cDNA clone DKFZp761M167 3', mRNA sequence /clone=DKFZp761M167 /clone_end=3' /gb=AL120287 /gi=5926186 /ug=Hs.237075 /len=792   | AL120287              |                          | 0.76                    |
| 8647  | 0.04655  | fcrc3336 | tm62d04.x1 NCI_CGAP_Brn25 cDNA clone IMAGE:2162695 3', mRNA sequence /clone=IMAGE:2162695 /clone_end=3' /gb=AI475033 /gi=4328078 /ug=Hs.36915 /len=453   | AI475033              |                          | 1.21                    |
| 8445  | 0.04655  | ncr5293  | DNA sequence from clone RP11-39K24 on chromosome 9 Contains the JAK2 (Janus kinase 2 (a protein tyrosine kinase)) gene, a pseudogene similar to polyprenyl synthetase, 2 pseudogenes similar to NADH-Ubiquinone/plastoquinone, a pseudogene similar to Cytochrome C oxidase, a pseudogene similar to TCF3 (transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)), IGHEP2 (immunoglobulin epsilon pseudogene 2), the INSL6 (insulin-like 6) gene and CpG islands, complete sequence | AL161450              | CAD13329                 | 1.32                    |

**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description   | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|---|-----------------------|--------------------------|-------------------------|
| 5772  | 0.04655  | miod3579 | phosphatidylinositol-3 phosphate 3-phosphatase adaptor subunit (3PAP), mRNA /cds=(132,2375) /gb=NM_019061 /gi=27477131 /ug=Hs.93872 /len=5064                                 | NM_019061             | NP_061934                | 0.85                    |
| 6149  | 0.04655  | fcr5571  | carbonyl reductase 1 (CBR1), mRNA   | NM_001757             | NP_001748                | 1.14                    |
| 10426 | 0.04655  | ncrc9684 | chromosome 18, clone CTD-2006O16, complete sequence   | AC110603              |                          | 0.77                    |
| 3746  | 0.04655  | fcr0206  | mitochondrial translational release factor 1 (MTRF1), mRNA /cds=(73,1410) /gb=NM_004294 /gi=4758743 /ug=Hs.80683 /len=1555  | NM_004294             | NP_004285                | 0.64                    |
| 4007  | 0.04655  | ncr9779  | chondroitin sulfate proteoglycan 6 (bamacan) (CSPG6), mRNA /cds=(92,3745) /gb=NM_005445 /gi=24475891 /ug=Hs.24485 /len=4096   | NM_005445             | NP_005436                | 0.85                    |
| 4431  | 0.04655  | ncr6893  | Ewing sarcoma breakpoint region 1 (EWSR1), transcript variant EWS, mRNA /cds=(44,2014) /gb=NM_005243 /gi=4885224 /ug=Hs.129953 /len=2390                                      | NM_005243             | NP_053733                | 0.87                    |
| 14658 | 0.04655  | ncrc2464 | BAC clone RP11-704F14 from 2, complete sequence   | AC112721              |                          | 0.69                    |
| 14064 | 0.04655  | ncr6108  | hypothetical protein FLJ33918 (FLJ33918), mRNA /cds=(491,856) /gb=NM_152407 /gi=22748862 /ug=Hs.17121 /len=2811   | NM_152407             | NP_689620                | 0.84                    |
| 13841 | 0.04655  | seoc0597 | Mus musculus mitochondrion, complete genome   | NC_005089             | NP_904328                | 0.76                    |
| 3853  | 0.046537 | fcr7114  | CD99 antigen (CD99), mRNA /cds=(184,741) /gb=NM_002414 /gi=20149541 /ug=Hs.433387 /len=1264   | NM_002414             | NP_002405                | 0.58                    |
| 7115  | 0.044186 | seob3191 | microtubule-actin crosslinking factor 1 (MACF1), transcript variant 1, mRNA /cds=(52,16344) /gb=NM_012090 /gi=15011903 /ug=Hs.108258 /len=17532                               | NM_012090             | NP_149033                | 1.21                    |
| 7332  | 0.044186 | ncrc5724 | a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 1 (ADAMTS1), mRNA /cds=(294,3146) /gb=NM_006988 /gi=11038653 /ug=Hs.8230 /len=4459 | NM_006988             | NP_008919                | 1.12                    |
| 8818  | 0.044186 | seoc4234 | Similar to KIAA1753 protein, clone IMAGE:5210724, mRNA /gb=BC033751 /gi=21707446 /ug=Hs.44976 /len=1275   | BC033751              |                          | 1.26                    |
| 5333  | 0.044186 | fcrb4241 | pVHL-interacting deubiquitinating enzyme 1 (VDU1), mRNA /cds=(262,2997) /gb=NM_015017 /gi=21489974 /ug=Hs.173694 /len=4323  | NM_015017             | NP_055832                | 0.89                    |
| 6385  | 0.044186 | mioa3963 | RAB32, member RAS oncogene family (RAB32), mRNA /cds=(183,860) /gb=NM_006834 /gi=20127508 /ug=Hs.32217 /len=1236  | NM_006834             | NP_006825                | 1.12                    |
| 6292  | 0.044186 | ncr3568  | KIN, antigenic determinant of recA protein (mouse) (KIN), mRNA /cds=(36,1217) /gb=NM_012311 /gi=13124882 /ug=Hs.123647 /len=1498  | NM_012311             | NP_036443                | 0.73                    |
| 9871  | 0.044186 | fcrc2008 | hypothetical protein BC013035 (LOC114926), mRNA /cds=(128,430) /gb=NM_138436 /gi=19923964 /ug=Hs.10018 /len=836   | NM_138436             | NP_612445                | 0.87                    |
| 4567  | 0.044186 | mioa8987 | CD163 antigen (CD163), mRNA /cds=(102,3572) /gb=NM_004244 /gi=19923275 /ug=Hs.74076 /len=4950   | NM_004244             | NP_004235                | 1.25                    |

| TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma |          |          |  |                       |                          |                         |
|---|----------|----------|--|-----------------------|--------------------------|-------------------------|
| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
| 6336  | 0.044186 | mioa1427 | pumilio 2 (Drosophila) (PUM2), mRNA /cds=(24,3218) /gb=NM_015317 /gi=13491167 /ug=Hs.6151 /len=6111  | NM_015317             | NP_056132                | 1.14                    |
| 7406  | 0.044186 | fcrb6211 | hypothetical protein FLJ14511 (FLJ14511), mRNA /cds=(23,1273) /gb=NM_033087 /gi=14861835 /ug=Hs.40919 /len=1835  | NM_033087             | NP_932077                | 1.20                    |
| 2812  | 0.044186 | seoa1812 | synaptotagmin XI, clone MGC:26698 IMAGE:4819614, mRNA, complete cds  | BC039205              | NP_689493                | 0.74                    |
| 2541  | 0.044186 | ncr1967  | serine racemase (SRR), mRNA /cds=(69,1091) /gb=NM_021947 /gi=11345491 /ug=Hs.27335 /len=2477   | NM_021947             | NP_068766                | 0.82                    |
| 6765  | 0.044186 | ncrc1367 | fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3), mRNA /cds=(46,447) /gb=NM_004102 /gi=10938020 /ug=Hs.49881 /len=679 | NM_004102             | NP_004093                | 0.78                    |
| 11433   | 0.041922 | mioc7952 | annexin A7 (ANXA7), transcript variant 2, mRNA /cds=(61,1527) /gb=NM_004034 /gi=4809278 /ug=Hs.386741 /len=2176  | NM_004034             | NP_004025                | 0.68                    |
| 11412   | 0.041922 | miod6090 | X-ray repair complementing defective repair in Chinese hamster cells 1 (XRCC1), mRNA /cds=(106,2007) /gb=NM_006297 /gi=5454171 /ug=Hs.98493 /len=2083          | NM_006297             | NP_006288                | 1.15                    |
| 7697  | 0.041922 | miod4686 | thioredoxin interacting protein (TXNIP), mRNA /cds=(222,1397) /gb=NM_006472 /gi=5454161 /ug=Hs.179526 /len=2704  | NM_006472             | NP_006463                | 1.22                    |
| 2733  | 0.041922 | miod0712 | cDNA FLJ38058 fis, clone CTONG2014898. /gb=AK095377 /gi=21754623 /ug=Hs.355780 /len=4161   | AK095377              | NP_036296                | 1.15                    |
| 10018   | 0.041922 | mioc5067 | guanine nucleotide exchange factor mRNA, complete cds. /cds=(1,3999) /gb=L13858 /gi=306779 /ug=Hs.406365 /len=3999   | L13858                | AAA35914                 | 1.29                    |
| 1833  | 0.041922 | fcr0472  | hypothetical protein MGC20486 (MGC20486), mRNA /cds=(422,1681) /gb=NM_052844 /gi=16418346 /ug=Hs.80449 /len=1782   | NM_052844             | NP_443076                | 1.21                    |
| 7789  | 0.041922 | mioa7587 | mRNA full length insert cDNA clone EUROIMAGE 2004669   | AL389951              | NP_710151                | 0.88                    |
| 1584  | 0.041922 | fcrb3207 | cDNA FLJ35502 fis, clone SMINT2009212. /cds=(33,416) /gb=AK092821 /gi=21751511 /ug=Hs.220963 /len=2102   | AK092821              | BAC03984                 | 1.11                    |
| 729   | 0.041922 | ncr9039  | sprouty 2 (Drosophila) (SPRY2), mRNA /cds=(382,1329) /gb=NM_005842 /gi=22209007 /ug=Hs.18676 /len=2126   | NM_005842             | NP_005833                | 0.71                    |
| 6685  | 0.041922 | fcrb2301 | ribosomal protein S9 (RPS9), mRNA /cds=(35,619) /gb=NM_001013 /gi=14141192 /ug=Hs.180920 /len=691  | NM_001013             | NP_001004                | 0.81                    |
| 8808  | 0.039754 | seoc1220 | DNA sequence from clone RP11-180N18 on chromosome 1, complete sequence   | AL772411              |                          | 1.12                    |
| 5159  | 0.039754 | seoa0931 | RAD23 A (S. cerevisiae) (RAD23A), mRNA /cds=(110,1201) /gb=NM_005053 /gi=19924137 /ug=Hs.180455 /len=1793  | NM_005053             | NP_005044                | 0.86                    |
| 11511   | 0.039754 | seoc2213 | cDNA: FLJ22554 fis, clone HSI01092   | AK026207              | NP_631903                | 0.86                    |
| 5801  | 0.039754 | miod2319 | mRNA; cDNA DKFZp686A1873 (from clone DKFZp686A1873) /gb=AL833613 /gi=21734260 /ug=Hs.375009 /len=3634  | AL833613              | Q9H7B2                   | 1.25                    |

| TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma |          |          |   |                       |                          |                         |
|---|----------|----------|---|-----------------------|--------------------------|-------------------------|
| Spot  | p-value  | Clone    | Description   | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
| 9185  | 0.039754 | mioc2717 | UI-1-BB1p-akd-c-08-0-UI.s1 NCI_CGAP_P16 cDNA clone UI-1-BB1p-akd-c-08-0-UI 3', mRNA sequence /clone=UI-1-BB1p-akd-c-08-0-UI /clone_end=3' /gb=BQ026195 /gi=19761474 /ug=Hs.308520 /len=1138 | BQ026195              |                          | 1.26                    |
| 4534  | 0.039754 | mioa9714 | DNA sequence from clone RP11-165O3 on chromosome 10, complete sequence  | AL158160              |                          | 1.15                    |
| 7045  | 0.039754 | seoa6078 | methionine adenosyltransferase II, beta (MAT2B), mRNA /cds=(73,1077) /gb=NM_013283 /gi=20127525 /ug=Hs.54642 /len=2054  | NM_013283             | NP_877725                | 1.13                    |
| 14792   | 0.039754 | miod0642 | wt94d09.x1 NCI_CGAP_GC6 cDNA clone IMAGE:2515121 3', mRNA sequence /clone=IMAGE:2515121 /clone_end=3' /gb=AW071632 /gi=6026630 /ug=Hs.414880 /len=122                                       | AW071632              | NP_653087                | 0.64                    |
| 7048  | 0.039754 | seoa6654 | twisted gastrulation 1 (Drosophila) (TWSG1), mRNA /cds=(106,777) /gb=NM_020648 /gi=21314788 /ug=Hs.247302 /len=3693   | NM_020648             | NP_065699                | 1.13                    |
| 7610  | 0.039754 | miob8578 | pantothenate kinase 2 (Hallervorden-Spatz syndrome) (PANK2), transcript variant 1, mRNA /cds=(56,1399) /gb=NM_153638 /gi=24430170 /ug=Hs.286212 /len=1959                                   | NM_153638             | NP_705905                | 1.14                    |
| 8633  | 0.039754 | mioc0006 | chromosome 5 clone CTD-2129G21, complete sequence   | AC008821              |                          | 1.21                    |
| 4453  | 0.039754 | ncrb6355 | partial RAB18 gene for RAS-related small GTPase RAB18, exons 4-6  | AJ277148              |                          | 1.18                    |
| 3258  | 0.039754 | fcrb8891 | paired immunoglobulin-like receptor beta (PILR(BETA)), mRNA /cds=(289,972) /gb=NM_013440 /gi=7305386 /ug=Hs.349256 /len=993   | NM_013440             | NP_839956                | 0.89                    |
| 13678   | 0.03768  | mioc2750 | toll-like receptor 3 (TLR3), mRNA /cds=(102,2816) /gb=NM_003265 /gi=19718735 /ug=Hs.29499 /len=3057   | NM_003265             | NP_003256                | 0.79                    |
| 10874   | 0.03768  | ncrc0826 | 3 BAC RP11-245C23 (Roswell Park Cancer Institute BAC Library) complete sequence   | AC076966              |                          | 1.42                    |
| 5947  | 0.03768  | mioa2626 | integrin alpha-E derived mRNA sequence  | AF289864              | NP_002199                | 0.79                    |
| 10229   | 0.03768  | seoa9656 | complement C1r-like proteinase precursor, (LOC51279), mRNA /cds=(18,1481) /gb=NM_016546 /gi=7706082 /ug=Hs.98571 /len=3345  | NM_016546             | NP_057630                | 1.16                    |
| 2614  | 0.03768  | ncrb5060 | beta-site APP-cleaving enzyme (BACE), transcript variant a, mRNA /cds=(447,1952) /gb=NM_012104 /gi=21040369 /ug=Hs.49349 /len=5832  | NM_012104             | NP_620429                | 0.68                    |
| 10396   | 0.03768  | hfcr2653 | PRO2000 protein (PRO2000), mRNA /cds=(91,4263) /gb=NM_014109 /gi=24497617 /ug=Hs.222088 /len=4916   | NM_014109             | NP_054828                | 1.33                    |
| 2771  | 0.03768  | miod1166 | clone 23574 mRNA sequence   | U90905                |                          | 1.21                    |
| 7476  | 0.035696 | fcrb9528 | eukaryotic translation initiation factor 4E (EIF4E), mRNA /cds=(19,672) /gb=NM_001968 /gi=4503534 /ug=Hs.79306 /len=1842  | NM_001968             | NP_001959                | 1.16                    |
| 11960   | 0.035696 | seob8425 | TNF-induced protein (GG2-1), mRNA /cds=(198,770) /gb=NM_014350 /gi=7657123 /ug=Hs.17839 /len=2003   | NM_014350             | NP_055165                | 1.30                    |

| TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma |          |          |  |                       |                          |                         |
|---|----------|----------|--|-----------------------|--------------------------|-------------------------|
| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
| 11320   | 0.035696 | miob8989 | nuclear fragile X mental retardation protein interacting protein 1 (NUFIP1), mRNA /cds=(1,1488) /gb=NM_012345 /gi=6912541 /ug=Hs.120247 /len=3463                          | NM_012345             | NP_036477                | 0.84                    |
| 11167   | 0.035696 | seoc7091 | clone IMAGE:5273745, mRNA  | BC044910              | NP_115749                | 1.16                    |
| 13620   | 0.035696 | fcr2852  | cDNA FLJ36860 fis, clone ASTRO2015295. /gb=AK094179 /gi=21753186 /ug=Hs.352406 /len=2882   | AK094179              | NP_612398                | 1.15                    |
| 14801   | 0.035696 | mioc2735 | clone IMAGE:3452986, mRNA  | BC013088              | NP_689407                | 1.44                    |
| 2311  | 0.035696 | seoa2300 | thyroid hormone receptor-associated protein, 150 kDa subunit (TRAP150), mRNA /cds=(203,3070) /gb=NM_005119 /gi=4827039 /ug=Hs.108319 /len=3618                             | NM_005119             | NP_005110                | 1.15                    |
| 10248   | 0.035696 | seob5130 | clone IMAGE:4825327, mRNA /gb=BC042032 /gi=27469766 /ug=Hs.436320 /len=1100  | BC042032              |                          | 0.78                    |
| 3901  | 0.035696 | ncr0016  | estrogen receptor 1 (ESR1), mRNA /cds=(361,2148) /gb=NM_000125 /gi=4503602 /ug=Hs.1657 /len=6450   | NM_000125             | NP_000116                | 1.09                    |
| 14215   | 0.035696 | fcrb7733 | AGENCOURT_6652750 NIH_MGC_118 cDNA clone IMAGE:5755843 5', mRNA sequence /clone=IMAGE:5755843 /clone_end=5' /gb=BM922739 /gi=19373118 /ug=Hs.440535 /len=1116              | BM922739              |                          | 0.63                    |
| 6509  | 0.035696 | seoa0418 | fibroblast activation protein, alpha (FAP), mRNA /cds=(209,2491) /gb=NM_004460 /gi=16933539 /ug=Hs.418 /len=2788   | NM_004460             | NP_004451                | 1.20                    |
| 13889   | 0.035696 | miob2858 | protein phosphatase 1, regulatory (inhibitor) subunit 3C (PPP1R3C), mRNA /cds=(58,1011) /gb=NM_005398 /gi=21314622 /ug=Hs.303090 /len=2524                                 | NM_005398             | NP_005389                | 1.29                    |
| 11073   | 0.035693 | mioc7191 | cDNA FLJ11174 fis, clone PLACE1007367. /gb=AK002036 /gi=7023674 /ug=Hs.24359 /len=2285   | AK002036              |                          | 1.38                    |
| 12933   | 0.0338   | mioc3793 | cDNA FLJ34764 fis, clone NT2NE2002311. /gb=AK092083 /gi=21750590 /ug=Hs.111583 /len=2552   | AK092083              | NP_057635                | 0.82                    |
| 9666  | 0.0338   | mioa8768 | DNA sequence from clone RP11-358L16 on chromosome 10, complete sequence  | AL445201              |                          | 0.81                    |
| 4995  | 0.0338   | ncrc6127 | S100 calcium binding protein A10 (annexin II ligand, calpactin I, light polypeptide (p11)) (S100A10), mRNA /cds=(112,405) /gb=NM_002966 /gi=4506760 /ug=Hs.400250 /len=649 | NM_002966             | NP_002957                | 0.84                    |
| 2278  | 0.0338   | miob3320 | latent transforming growth factor beta binding protein 1 (LTBP1), mRNA /cds=(91,4275) /gb=NM_000627 /gi=4557730 /ug=Hs.241257 /len=5075                                    | NM_000627             | NP_000618                | 0.88                    |
| 4498  | 0.0338   | mioa1226 | mRNA for KIAA0265 gene, partial cds. /cds=(1,1206) /gb=D87454 /gi=1665796 /ug=Hs.192966 /len=5551  | D87454                | BAA13395                 | 1.24                    |
| 9320  | 0.0338   | miob9677 | SEQ. ID. No. 62  |                       |                          | 1.25                    |
| 10321   | 0.031988 | ncr6332  | DNA sequence from clone RP11-341A19 on chromosome 10, complete sequence  | AL671972              |                          | 1.55                    |

**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|--|-----------------------|--------------------------|-------------------------|
| 14056 | 0.031988 | ncr3727  | mRNA for KIAA1748 protein, partial cds.<br>/cds=(1120,3396) /gb=AB051535 /gi=12698040<br>/ug=Hs.27239 /len=4545  | AB051535              | BAB21839                 | 0.71                    |
| 3445  | 0.031988 | fcrb2320 | mRNA; cDNA DKFZp434A1520 (from clone DKFZp434A1520); partial cds /cds=(1,551) /gb=AL137544 /gi=6808224 /ug=Hs.406722 /len=2775                               | AL137544              | CAB70802                 | 1.10                    |
| 10411 | 0.031988 | ncrc2469 | 601556349T1 NIH_MGC_58 cDNA clone IMAGE:3826069 3', mRNA sequence /clone=IMAGE:3826069 /clone_end=3' /gb=BE739647 /gi=10153639 /ug=Hs.88156 /len=692         | BE739647              | NP_003681                | 1.16                    |
| 6418  | 0.031988 | mioa3514 | protein kinase, interferon-inducible double stranded RNA dependent activator (PRKRA), mRNA /cds=(108,1049) /gb=NM_003690 /gi=20149526 /ug=Hs.18571 /len=1843 | NM_003690             | NP_624311                | 0.77                    |
| 8244  | 0.031988 | seoc5209 | peptidylprolyl isomerase (cyclophilin)-like 4 (PPIL4), mRNA /cds=(31,1509) /gb=NM_139126 /gi=22538483 /ug=Hs.11065 /len=2481                                 | NM_139126             | NP_060019                | 1.10                    |
| 6349  | 0.031988 | ncrb0811 | upregulated in colorectal cancer gene 1 (UCC1), mRNA /cds=(20,1054) /gb=NM_017549 /gi=24475585 /ug=Hs.46721 /len=2601  | NM_017549             | NM_017549                | 1.35                    |
| 10670 | 0.030258 | miod7454 | DNA sequence from clone RP11-247A12 on chromosome 9, complete sequence   | AL158151              | NP_057285                | 0.80                    |
| 11301 | 0.030258 | fcrb6084 | uplicated clone on array   |                       | NP_056399                | 0.87                    |
| 2704  | 0.030258 | miob1833 | angiomotin like 2 (AMOTL2), mRNA /cds=(1,1712) /gb=NM_016201 /gi=7705577 /ug=Hs.92186 /len=3542  | NM_016201             | NP_057285                | 0.82                    |
| 5066  | 0.030258 | fcrb6185 | DKFZP586F1524 protein (DKFZP586F1524), mRNA /cds=(50,1156) /gb=NM_015584 /gi=7661671 /ug=Hs.241543 /len=2100   | NM_015584             | NP_056050                | 0.87                    |
| 11697 | 0.030258 | ncr8357  | hypothetical protein FLJ20220 (FLJ20220), mRNA /cds=(141,1643) /gb=NM_017718 /gi=8923209 /ug=Hs.21126 /len=2422  | NM_017718             | NP_060188                | 1.07                    |
| 2580  | 0.028607 | ncrb5837 | mRNA for KIAA0689 protein, partial cds   | AB014589              | NP_002189                | 0.76                    |
| 14745 | 0.028607 | miob8458 | 12 BAC RP11-321F8 (Roswell Park Cancer Institute BAC Library) complete sequence  | AC063948              | NP_056277                | 0.71                    |
| 7467  | 0.028607 | fcrb8664 | interferon regulatory factor 1 (IRF1), mRNA /cds=(198,1175) /gb=NM_002198 /gi=4504720 /ug=Hs.80645 /len=2035   | NM_002198             | NP_060390                | 1.17                    |
| 4403  | 0.028607 | miod3501 | DKFZP586L0724 protein (DKFZP586L0724), mRNA /cds=(6,2165) /gb=NM_015462 /gi=21361467 /ug=Hs.26761 /len=2456  | NM_015462             | NP_002606                | 1.33                    |
| 5749  | 0.028607 | hfcr3486 | up-regulated gene 4 (URG4), mRNA /cds=(14,2782) /gb=NM_017920 /gi=19923541 /ug=Hs.5131 /len=3606   | NM_017920             | NP_056385                | 0.81                    |
| 5671  | 0.028607 | fcr3559  | serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antipain, pigment epithelium derived factor), member 1 (SERPINF1), mRNA                          | NM_002615             | NP_061129                | 0.84                    |
| 5406  | 0.027032 | ncrc2796 | autism susceptibility candidate 2 (AUTS2), mRNA /cds=(322,4101) /gb=NM_015570 /gi=17864089 /ug=Hs.32168 /len=5972  | NM_015570             | NP_003109                | 0.80                    |

**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description   | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|---|-----------------------|--------------------------|-------------------------|
| 4384  | 0.027032 | ncr3483  | cytokine-like protein C17 (C17), mRNA /cds=(29,439) /gb=NM_018659 /gi=8922107 /ug=Hs.13872 /len=999   | NM_018659             | NP_061129                | 1.01                    |
| 5513  | 0.027032 | ncrc9727 | secreted protein, acidic, cysteine-rich (osteonectin) (SPARC), mRNA /cds=(58,969) /gb=NM_003118 /gi=4507170 /ug=Hs.111779 /len=2133   | NM_003118             | NP_006381                | 0.85                    |
| 8496  | 0.02553  | ncrc0032 | BAC clone RP11-1252L15 from 7, complete sequence  | AC093701              | NP_003195                | 0.77                    |
| 2780  | 0.02553  | seoa2633 | clone IMAGE:4153424, mRNA   | BC018305              | NP_116190                | 0.80                    |
| 5444  | 0.02553  | ncrc3129 | nuclear factor (erythroid-derived 2)-like 1 (NFE2L1), mRNA /cds=(593,2911) /gb=NM_003204 /gi=4505378 /ug=Hs.83469 /len=4760   | NM_003204             | NP_003195                | 0.81                    |
| 2969  | 0.02553  | fcrb1697 | junctional adhesion molecule 3 (JAM3), mRNA /cds=(25,1092) /gb=NM_032801 /gi=21704285 /ug=Hs.334703 /len=3675   | NM_032801             | NP_115835                | 1.13                    |
| 10545 | 0.02553  | mioc0791 | yj71g12.s1 Soares breast 2NbHBst cDNA clone IMAGE:154246 3', mRNA sequence /clone=IMAGE:154246 /clone_end=3' /gb=R52072 /gi=813974 /ug=Hs.411221 /len=458                                 | R52072                | NP_003396                | 1.24                    |
| 2274  | 0.02553  | miob2645 | embryonal Fyn-associated substrate (EFS), transcript variant 1, mRNA /cds=(609,2294) /gb=NM_005864 /gi=14589877 /ug=Hs.24587 /len=3132  | NM_005864             | NP_005855                | 0.85                    |
| 1992  | 0.02553  | hfcr0786 | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide (YWHAH), mRNA /cds=(198,938) /gb=NM_003405 /gi=21464102 /ug=Hs.349530 /len=1775                   | NM_003405             | NP_004521                | 1.33                    |
| 8077  | 0.0241   | miob8454 | pre-mRNA splicing SR protein rA4 (KIAA1172), mRNA   | XM_047889             |                          | 1.20                    |
| 3799  | 0.0241   | fcr3539  | matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) (MMP2), mRNA   | NM_004530             | NP_004521                | 0.78                    |
| 9494  | 0.0241   | mioc1008 | cDNA FLJ35052 fis, clone OCBBF2018234, highly similar to GUANINE NUCLEOTIDE-BINDING PROTEIN G(I)/G(S)/G(O) GAMMA-2 SUBUNIT (G GAMMA-I). /gb=AK092371 /gi=21750949 /ug=Hs.289026 /len=3733 | AK092371              | NP_064599                | 1.28                    |
| 4067  | 0.0241   | mioa9865 | Cloning vector pAS2, complete sequence  | U30496                | NP_060691                | 0.58                    |
| 12722 | 0.0241   | ncrb3424 | hypothetical protein from EUROIMAGE 1977056 (LOC56965), mRNA /cds=(609,1358) /gb=NM_020213 /gi=9910373 /ug=Hs.8694 /len=2359  | NM_020213             | NP_002746                | 1.16                    |
| 6379  | 0.0241   | mioa2696 | mRNA; cDNA DKFZp727M031 (from clone DKFZp727M031)   | AL122062              | NP_000101                | 1.21                    |
| 9946  | 0.022737 | miob7836 | mitogen-activated protein kinase kinase 1 (MAP2K1), mRNA /cds=(73,1254) /gb=NM_002755 /gi=14589898 /ug=Hs.3446 /len=2222  | NM_002755             | NP_002746                | 1.13                    |
| 2677  | 0.022737 | mioa3997 | dihydropyrimidine dehydrogenase (DPYD), mRNA /cds=(102,3179) /gb=NM_000110 /gi=4557874 /ug=Hs.1602 /len=4407  | NM_000110             | NP_000101                | 1.15                    |

**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|--|-----------------------|--------------------------|-------------------------|
| 3011  | 0.022737 | ncrb8815 | mitochondrion, complete genome   | NC_001807             | NP_536843                | 0.75                    |
| 9069  | 0.022737 | fcrb9052 | BX111321 Soares_pregnant_uterus_NbHPU cDNA clone IMAGp998C221112, mRNA sequence /clone=IMAGp998C221112_/_IMAGE:469197 /gb=BX111321 /gi=27878470 /ug=Hs.181272 /len=701                                 | BX111321              | NP_775902                | 1.10                    |
| 14707 | 0.022737 | miob7876 | chromosome 5 clone CTD-2306L10, complete sequence  | AC116336              | NP_000349                | 0.77                    |
| 11269 | 0.022737 | fcrc0921 | UI-1-BC1p-atl-g-09-0-UI.s1 NCI_CGAP_PI3 cDNA clone UI-1-BC1p-atl-g-09-0-UI 3', mRNA sequence /clone=UI-1-BC1p-atl-g-09-0-UI /clone_end=3' /gb=BQ012081 /gi=19736982 /ug=Hs.5699 /len=1104              | BQ012081              |                          | 0.68                    |
| 9449  | 0.022737 | miob9124 | transforming growth factor, beta-induced, 68kDa (TGFB1), mRNA /cds=(48,2099) /gb=NM_000358 /gi=4507466 /ug=Hs.118787 /len=2691   | NM_000358             | NP_064506                | 0.80                    |
| 14172 | 0.021441 | seob7506 | RNA binding motif protein 8B (RBM8B) mRNA, complete cds  | AF231512              | NP_009171                | 1.18                    |
| 6944  | 0.021441 | fcrb6698 | UDP-glucose ceramide glucosyltransferase-like 2 (UGCG2), mRNA /cds=(72,4622) /gb=NM_020121 /gi=11386200 /ug=Hs.22983 /len=4848   | NM_020121             | NP_064506                | 0.80                    |
| 5558  | 0.021441 | fcrb8505 | dual specificity phosphatase 12 (DUSP12), mRNA /cds=(12,1034) /gb=NM_007240 /gi=6005955 /ug=Hs.44229 /len=1271   | NM_007240             | NP_149126                | 0.81                    |
| 8239  | 0.021441 | seoc3511 | hypothetical protein BC010734 (LOC147632), mRNA /cds=(1015,1077) /gb=NM_138478 /gi=19924010 /ug=Hs.48821 /len=1302   | NM_138478             | NP_002832                | 1.09                    |
| 13206 | 0.021441 | mioc1910 | spinal cord-derived growth factor-B (SCDGF-B), transcript variant 1, mRNA /cds=(176,1288) /gb=NM_025208 /gi=15451919 /ug=Hs.112885 /len=3808   | NM_025208             | NP_055545                | 1.60                    |
| 2923  | 0.021441 | seob6395 | protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA /cds=(718,5055) /gb=NM_002841 /gi=18860897 /ug=Hs.89627 /len=5787   | NM_002841             | NP_000305                | 0.69                    |
| 6611  | 0.020207 | seob3105 | KIAA0152 gene product (KIAA0152), mRNA /cds=(129,1007) /gb=NM_014730 /gi=7661947 /ug=Hs.181418 /len=6322   | NM_014730             | NP_002606                | 1.12                    |
| 8218  | 0.020207 | seob8873 | phosphatase and tensin (mutated in multiple advanced cancers 1) (PTEN), mRNA /cds=(1035,2246) /gb=NM_000314 /gi=4506248 /ug=Hs.10712 /len=3160   | NM_000314             | NP_002024                | 1.22                    |
| 3262  | 0.020207 | fcrb9280 | serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1 (SERPIN1), mRNA /cds=(39,1082) /gb=NM_002615 /gi=4505708 /ug=Hs.173594 /len=1199 | NM_002615             | NP_001144                | 0.69                    |
| 11287 | 0.019035 | fcrc4005 | fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific) (FUT4), mRNA /cds=(174,1766) /gb=NM_002033 /gi=4503810 /ug=Hs.2173 /len=2861   | NM_002033             | NP_000084                | 1.41                    |



**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|--|-----------------------|--------------------------|-------------------------|
| 2277  | 0.019035 | miob3174 | annexin A4 (ANXA4), mRNA /cds=(74,1039) /gb=NM_001153 /gi=4809272 /ug=Hs.422986 /len=1982  | NM_001153             | NP_009149                | 0.81                    |
| 7187  | 0.019035 | fcrb2198 | collagen, type V, alpha 1 (COL5A1), mRNA /cds=(383,5899) /gb=NM_000093 /gi=16554578 /ug=Hs.146428 /len=6496  | NM_000093             | NP_002023                | 1.15                    |
| 2891  | 0.019035 | seob0815 | patched related protein translocated in renal cancer (TRC8), mRNA /cds=(215,2209) /gb=NM_007218 /gi=21314653 /ug=Hs.28285 /len=2481  | NM_007218             | NP_054860                | 0.88                    |
| 3180  | 0.017921 | seob8333 | ferritin, heavy polypeptide 1 (FTH1), mRNA /cds=(92,664) /gb=NM_002032 /gi=4503794 /ug=Hs.418650 /len=801  | NM_002032             | NP_002023                | 0.82                    |
| 3454  | 0.017921 | fcrb3040 | contactin associated protein-like 2 (CNTNAP2), mRNA /cds=(141,4136) /gb=NM_014141 /gi=21071040 /ug=Hs.106552 /len=8107   | NM_014141             | NP_054860                | 0.79                    |
| 9188  | 0.017921 | mioc3542 | UI-E-CL1-afb-f-11-0-UI.r1 UI-E-CL1 cDNA clone UI-E-CL1-afb-f-11-0-UI 5', mRNA sequence /clone=UI-E-CL1-afb-f-11-0-UI /clone_end=5' /gb=BM695778 /gi=19009036 /ug=Hs.54629 /len=838 | BM695778              |                          | 0.76                    |
| 14710 | 0.016863 | miob8608 | chromosome 18, clone RP11-380M21, complete sequence  | AC120349              | NP_005754                | 1.22                    |
| 5903  | 0.016863 | mioa1300 | cDNA FLJ10171 fis, clone HEMBA1003807  | AK001033              |                          | 0.75                    |
| 1334  | 0.016863 | fcrb7215 | aminoadipate-semialdehyde synthase (AASS), mRNA /cds=(97,2877) /gb=NM_005763 /gi=13027639 /ug=Hs.184168 /len=3233  | NM_005763             | NP_005351                | 0.58                    |
| 11970 | 0.016863 | seoc0754 | mRNA for KIAA1728 protein, partial cds. /cds=(1,4937) /gb=AB051515 /gi=12698000 /ug=Hs.252748 /len=6585  | AB051515              | NP_060566                | 0.80                    |
| 5207  | 0.016863 | seob3158 | v-maf musculoaponeurotic fibrosarcoma oncogene (avian) (MAF), mRNA /cds=(808,2019) /gb=NM_005360 /gi=5453735 /ug=Hs.30250 /len=2145  | NM_005360             | NP_064629                | 1.20                    |
| 11253 | 0.016863 | fcrb4307 | hypothetical protein similar to beta-transducin family (FLJ10458), mRNA /cds=(14,1471) /gb=NM_018096 /gi=20070287 /ug=Hs.85570 /len=2593   | NM_018096             | NP_055416                | 0.64                    |
| 2682  | 0.016863 | mioa5452 | choline phosphotransferase 1 (CHPT1), mRNA /cds=(171,1391) /gb=NM_020244 /gi=9910383 /ug=Hs.171889 /len=1536   | NM_020244             | NP_009092                | 0.83                    |
| 9361  | 0.016863 | fcrb0892 | EH-domain containing 2 (EHD2), mRNA /cds=(162,1793) /gb=NM_014601 /gi=21361461 /ug=Hs.325650 /len=3517   | NM_014601             | NP_055416                | 1.20                    |
| 5214  | 0.015858 | seob4216 | leukocyte specific transcript 1 (LST1), mRNA /cds=(1,258) /gb=NM_007161 /gi=6005740 /ug=Hs.380427 /len=258   | NM_007161             | NP_057228                | 1.55                    |
| 13476 | 0.015858 | seoa2966 | chromosome 5 clone CTC-484M2, complete sequence  | AC020899              |                          | 0.68                    |
| 2097  | 0.015858 | ncr8811  | PTD002 protein (PTD002), mRNA /cds=(24,632) /gb=NM_016144 /gi=20070278 /ug=Hs.41767 /len=1456  | NM_016144             | NP_057228                | 0.83                    |
| 7483  | 0.014906 | fcrb0346 | chromosome 15, clone RP11-186H10, complete sequence  | AC113190              | NP_006100                | 1.14                    |

**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|--|-----------------------|--------------------------|-------------------------|
| 6510  | 0.014906 | seoa0515 | UI-H-DT0-atx-f-13-0-UI.s1 NCI_CGAP_DT0 cDNA clone IMAGE:5865612 3', mRNA sequence /clone=IMAGE:5865612 /clone_end=3' /gb=BM994157 /gi=19719058 /ug=Hs.406666 /len=1283 | BM994157              | NP_036357                | 1.13                    |
| 9400  | 0.014002 | fcrc1563 | SKB1 (S. pombe) (SKB1), mRNA /cds=(92,2005) /gb=NM_006109 /gi=20070219 /ug=Hs.12912 /len=2413  | NM_006109             | NP_821070                | 1.45                    |
| 8619  | 0.014002 | fcrc6948 | duplicated clone on array  |                       |                          | 1.45                    |
| 13591 | 0.014002 | fcrc4051 | nucleotide binding protein 2 (MinD E. coli) (NUBP2), mRNA /cds=(64,879) /gb=NM_012225 /gi=6912539 /ug=Hs.256549 /len=1351  | NM_012225             | NP_036357                | 0.54                    |
| 3181  | 0.014002 | fcrb3476 | protein phosphatase 2A, regulatory subunit B' (PR 53) (PPP2R4), mRNA /cds=(190,1161) /gb=NM_021131 /gi=10880986 /ug=Hs.400740 /len=2661                                | NM_021131             | NP_057023                | 0.81                    |
| 8996  | 0.014002 | miob3374 | 3 BAC RP11-373L8 (Roswell Park Cancer Institute BAC Library) complete sequence   | AC128650              | NP_056238                | 1.27                    |
| 7946  | 0.013147 | ncr6684  | VDUP1 gene, complete cds   | AB051901              | BAB18859                 | 1.30                    |
| 2210  | 0.013147 | mioa4077 | CGI-09 protein (CGI-09), mRNA /cds=(73,1566) /gb=NM_015939 /gi=19923474 /ug=Hs.128791 /len=2272  | NM_015939             | NP_001887                | 1.14                    |
| 3022  | 0.013147 | ncrc1495 | aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase (AASDHPT), mRNA /cds=(147,1076) /gb=NM_015423 /gi=20357567 /ug=Hs.64595 /len=2880              | NM_015423             | NP_056238                | 0.83                    |
| 9927  | 0.013147 | mioc1238 | cDNA FLJ33955 fis, clone CTONG2018652, moderately similar to ZINC FINGER PROTEIN MFG-3. /gb=AK091274 /gi=21749606 /ug=Hs.270997 /len=3472                              | AK091274              | NP_002478                | 1.11                    |
| 111   | 0.013147 | fcr7656  | casein kinase 2, alpha prime polypeptide (CSNK2A2), mRNA /cds=(164,1216) /gb=NM_001896 /gi=4503096 /ug=Hs.82201 /len=1677  | NM_001896             | NP_085153                | 1.46                    |
| 13410 | 0.012336 | mioa8789 | chromosome 8, clone RP11-313J18, complete sequence   | AC090571              | NP_001871                | 1.36                    |
| 3261  | 0.012336 | fcrb9147 | necdin (mouse) (NDN), mRNA /cds=(87,1052) /gb=NM_002487 /gi=10800414 /ug=Hs.50130 /len=1897  | NM_002487             | NP_116050                | 1.22                    |
| 10056 | 0.012336 | seob9300 | mRNA for KIAA1715 protein, partial cds. /cds=(152,1441) /gb=AB051502 /gi=12697974 /ug=Hs.209561 /len=5714  | AB051502              | NP_005587                | 0.83                    |
| 6451  | 0.012336 | miob2897 | mRNA; cDNA DKFZp586C1723 (from clone DKFZp586C1723) /gb=AL050192 /gi=4884408 /ug=Hs.80285 /len=1797  | AL050192              | NP_065176                | 1.28                    |
| 2193  | 0.01157  | mioa9258 | hypothetical protein MGC5139 (MGC5139), mRNA /cds=(14,115) /gb=NM_032661 /gi=14249217 /ug=Hs.127610 /len=457   | NM_032661             | NP_116050                | 0.84                    |
| 14306 | 0.01157  | mioc4961 | clone IMAGE:3912859, mRNA /gb=BC024316 /gi=19353860 /ug=Hs.326416 /len=2677  | BC024316              | NP_056345                | 0.74                    |
| 13386 | 0.010844 | seoc2682 | neuron navigator 1 (NAV1), mRNA /cds=(348,5972) /gb=NM_020443 /gi=27262621 /ug=Hs.6298 /len=11365  | NM_020443             | NP_006682                | 0.68                    |

**TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma**

| Spot  | p-value  | Clone    | Description   | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
|-------|----------|----------|---|-----------------------|--------------------------|-------------------------|
| 10037 | 0.010844 | miod4754 | hypothetical protein LOC51233, clone MGC:33025 IMAGE:5265935, mRNA, complete cds /cds=(304,690) /gb=BC028718 /gi=20380984 /ug=Hs.350465 /len=2630       | BC028718              | NP_036385                | 1.20                    |
| 3273  | 0.010844 | fcrc0456 | golgi reassembly stacking protein 2, 55kDa (GORASP2), mRNA /cds=(52,1524) /gb=NM_015530 /gi=20127538 /ug=Hs.6880 /len=2424                              | NM_015530             | NP_056345                | 0.87                    |
| 3080  | 0.010159 | ncrc5039 | extracellular link domain containing 1 (XLKD1), mRNA /cds=(91,1059) /gb=NM_006691 /gi=5729910 /ug=Hs.17917 /len=2313                                    | NM_006691             | NP_116052                | 0.84                    |
| 4021  | 0.010159 | ncrb6282 | transketolase-like 1 (TKTL1), mRNA /cds=(121,1794) /gb=NM_012253 /gi=7110726 /ug=Hs.102866 /len=2455  | NM_012253             | NP_003898                | 0.87                    |
| 12820 | 0.010159 | fcrc1905 | BX110673 NCI_CGAP_Lu24 cDNA clone IMAGp998J105308, mRNA sequence /clone=IMAGp998J105308_ IMAGE:2150121 /gb=BX110673 /gi=27836538 /ug=Hs.212998 /len=430 | BX110673              | NP_065080                | 0.79                    |
| 11308 | 0.009511 | fcrc6989 | hypothetical protein MGC10702 (MGC10702), mRNA /cds=(136,1662) /gb=NM_032663 /gi=14249221 /ug=Hs.179520 /len=2126                                       | NM_032663             | NP_116052                | 0.83                    |
| 9632  | 0.008899 | seoc1076 | clone MGC:9947 IMAGE:3876105, mRNA, complete cds /cds=(51,2216) /gb=BC013590 /gi=15488925 /ug=Hs.2437 /len=2651   | BC013590              | NP_055195                | 0.82                    |
| 4747  | 0.008899 | seob4333 | leucine zipper transcription factor-like 1 (LZTFL1), mRNA /cds=(125,1024) /gb=NM_020347 /gi=9966792 /ug=Hs.30824 /len=3384                              | NM_020347             | NP_065080                | 1.17                    |
| 7949  | 0.008899 | ncr7538  | PR01094 mRNA, complete cds  | AF116623              | NP_055444                | 1.63                    |
| 2627  | 0.008899 | mioa1337 | nerve growth factor receptor (TNFRSF16) associated protein 1 (NGFRAP1), mRNA /cds=(312,647) /gb=NM_014380 /gi=7657043 /ug=Hs.381039 /len=891            | NM_014380             | NP_002023                | 0.75                    |
| 10575 | 0.008322 | mioc8260 | qn42d12.x1 NCI_CGAP_Kid5 cDNA clone IMAGE:1900919 3', mRNA sequence /clone=IMAGE:1900919 /clone_end=3' /gb=AI302500 /gi=3961846 /ug=Hs.150811 /len=359  | AI302500              |                          | 0.54                    |
| 4610  | 0.008322 | miob1126 | Rho guanine nucleotide exchange factor (GEF) 10 (ARHGEF10), mRNA /cds=(3732,7097) /gb=NM_014629 /gi=7662041 /ug=Hs.20695 /len=8467                      | NM_014629             | NP_055444                | 0.77                    |
| 2198  | 0.008322 | mioa1701 | ferritin, heavy polypeptide 1 (FTH1), mRNA /cds=(92,664) /gb=NM_002032 /gi=4503794 /ug=Hs.418650 /len=801   | NM_002032             | NP_002023                | 0.82                    |
| 3561  | 0.007778 | ncrc6994 | IkB kinase-b (IKK-beta) mRNA, complete cds /cds=(144,2414) /gb=AF080158 /gi=4185274 /ug=Hs.226573 /len=3058   | AF080158              | NP_443192                | 1.19                    |
| 10872 | 0.007777 | ncrc0248 | DNA sequence from clone RP11-337N19 on chromosome 10, complete sequence   | AL353790              | NP_078855                | 0.50                    |

| TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma |          |          |   |                       |                          |                         |
|---|----------|----------|---|-----------------------|--------------------------|-------------------------|
| Spot  | p-value  | Clone    | Description   | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
| 3001  | 0.006782 | fcrb5539 | UI-H-D10-ato-k-22-0-UI.s1 NCI_CGAP_D10 cDNA clone IMAGE:5862285 3', mRNA sequence /clone=IMAGE:5862285 /clone_end=3' /gb=BM989936 /gi=19709325 /ug=Hs.97600 /len=1040 | BM989936              | NP_065955                | 0.76                    |
| 6430  | 0.006782 | mioa6585 | retinoid binding protein 7 (CRBPV), mRNA /cds=(44,448) /gb=NM_052960 /gi=16418454 /ug=Hs.422688 /len=661  | NM_052960             | NP_443192                | 1.37                    |
| 8168  | 0.006782 | miod5310 | hypothetical protein FLJ23221 (FLJ23221), mRNA /cds=(24,419) /gb=NM_024579 /gi=13375757 /ug=Hs.18397 /len=519   | NM_024579             | NP_067060                | 1.14                    |
| 9316  | 0.006327 | seoa5838 | pleckstrin domain containing, family A (phosphoinositide binding specific) member 4 (PLEKHA4), mRNA /cds=(526,2865) /gb=NM_020904 /gi=10190743 /ug=Hs.9469 /len=3056  | NM_020904             | NP_062826                | 1.26                    |
| 14606   | 0.006327 | hfcr1950 | BAC clone RP11-93M12 from 4, complete sequence  | AC110766              | NP_006199                | 0.56                    |
| 7047  | 0.005899 | seoa6495 | selenoprotein K (SELK), mRNA /cds=(67,351) /gb=NM_021237 /gi=25014098 /ug=Hs.235356 /len=712  | NM_021237             | NP_009200                | 1.20                    |
| 10807   | 0.005899 | ncrb1186 | methyltransferase like 3 (METTL3), mRNA /cds=(87,1829) /gb=NM_019852 /gi=21361826 /ug=Hs.268149 /len=1959   | NM_019852             | NP_067635                | 0.74                    |
| 3331  | 0.005497 | seob2085 | ectonucleotide pyrophosphatase/phosphodiesterase 1 (ENPP1), mRNA /cds=(173,2794) /gb=NM_006208 /gi=13324676 /ug=Hs.11951 /len=3493                                    | NM_006208             | NP_004347                | 0.84                    |
| 5992  | 0.005119 | miob4441 | syntaxin binding protein 3 (STXBP3), mRNA /cds=(52,1830) /gb=NM_007269 /gi=6005885 /ug=Hs.8813 /len=2508  | NM_007269             | NP_005193                | 1.18                    |
| 10557   | 0.005119 | mioc3586 | clone IMAGE:4177972, mRNA   | BC041654              | NP_078787                | 1.20                    |
| 3838  | 0.004764 | hfcr2930 | CD81 antigen (target of antiproliferative antibody 1) (CD81), mRNA /cds=(41,751) /gb=NM_004356 /gi=21237760 /ug=Hs.54457 /len=1332                                    | NM_004356             | NP_004347                | 1.26                    |
| 12734   | 0.004764 | hfcr0521 | mRNA for FLJ00201 protein. /cds=(1,2119) /gb=AK074129 /gi=18676605 /ug=Hs.353001 /len=4443  | AK074129              | NP_116258                | 0.80                    |
| 10236   | 0.004764 | seob1660 | hypothetical protein MGC4701 (MGC4701), mRNA /cds=(149,1585) /gb=NM_024511 /gi=24308290 /ug=Hs.421054 /len=1686   | NM_024511             | NP_683513                | 2.00                    |
| 9265  | 0.004764 | miod7216 | clone IMAGE:4052238, mRNA, partial cds /cds=(1,73) /gb=BC014384 /gi=15680102 /ug=Hs.348514 /len=1449  | BC014384              | NP_005166                | 1.24                    |
| 4506  | 0.004764 | mioa2475 | chronic myelogenous leukemia tumor antigen 66 (CML66), mRNA /cds=(233,1984) /gb=NM_032869 /gi=23618845 /ug=Hs.195870 /len=2288  | NM_032869             | NP_113623                | 0.73                    |
| 13039   | 0.004431 | seoc7131 | 601571978T1 NIH_MGC_55 cDNA clone IMAGE:3838987 3', mRNA sequence /clone=IMAGE:3838987 /clone_end=3' /gb=BE748785 /gi=10162777 /ug=Hs.334633 /len=801                 | BE748785              | NP_008957                | 1.28                    |

| TABLE 3AA - Corresponding to Differentially Expressed Genes in Figure 29 - Asthma |          |          |  |                       |                          |                         |
|---|----------|----------|--|-----------------------|--------------------------|-------------------------|
| Spot  | p-value  | Clone    | Description  | Gene Accession Number | Protein Accession Number | Fold change Asthma/Ctrl |
| 2648  | 0.003825 | mioa5955 | ATP synthase, H transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 1 (ATP5G1), mRNA /cds=(120,530) /gb=NM_005175 /gi=4885080 /ug=Hs.80986 /len=631 | NM_005175             | NP_057568                | 0.85                    |
| 11163   | 0.003825 | seoc5933 | UI-H-DP0-avb-p-04-0-UI.s1 NCI_CGAP_Fs1 cDNA clone IMAGE:5877363 3', mRNA sequence /clone=IMAGE:5877363 /clone_end=3' /gb=BQ020727 /gi=19756005 /ug=Hs.446656 /len=1208 | BQ020727              |                          | 0.76                    |
| 2784  | 0.003825 | seoa3322 | dual specificity phosphatase 14 (DUSP14), mRNA /cds=(234,830) /gb=NM_007026 /gi=5902001 /ug=Hs.91448 /len=1471   | NM_007026             | NP_004056                | 0.77                    |
| 13648   | 0.003825 | fcrc7051 | hypothetical protein LOC51248 (LOC51248), mRNA /cds=(73,495) /gb=NM_016484 /gi=24475974 /ug=Hs.11042 /len=1006   | NM_016484             | NP_006274                | 0.80                    |
| 9296  | 0.003551 | seoc7414 | cDNA: FLJ21652 fis, clone COL08582. /gb=AK025305 /gi=10437794 /ug=Hs.98445 /len=2457   | AK025305              | NP_076997                | 1.18                    |
| 1612  | 0.00283  | ncrc0672 | cerebellar degeneration-related protein 1, 34kDa (CDR1), mRNA /cds=(61,732) /gb=NM_004065 /gi=4757963 /ug=Hs.278427 /len=1165  | NM_004065             | NP_004056                | 1.33                    |
| 3171  | 0.00283  | ncrc9343 | transforming, acidic coiled-coil containing protein 1 (TACC1), mRNA /cds=(321,2738) /gb=NM_006283 /gi=5454099 /ug=Hs.173159 /len=7758                                  | NM_006283             | NP_848660                | 0.76                    |
| 9888  | 0.00283  | fcrc4948 | hypothetical protein MGC5508 (MGC5508), mRNA /cds=(73,804) /gb=NM_024092 /gi=13129091 /ug=Hs.13662 /len=2097   | NM_024092             | NP_570896                | 1.24                    |
| 10858   | 0.00262  | fcrb2214 | DNA sequence from clone RP11-111L24 on chromosome 13q31.3-32.3, complete sequence  | AL137249              |                          | 1.65                    |
| 9987  | 0.00262  | mioc6395 | similar to putative, clone MGC:35555 IMAGE:5201681, mRNA, complete cds /cds=(181,711) /gb=BC027938 /gi=20380782 /ug=Hs.209569 /len=2498                                | BC027938              | NP_004369                | 1.45                    |
| 8276  | 0.002242 | seoa6516 | clone IMAGE:5263917, mRNA /gb=BC035134 /gi=23272887 /ug=Hs.124538 /len=4663  | BC035134              |                          | 1.22                    |
| 14530   | 0.001272 | ncrb6600 | clone IMAGE:4445384, mRNA  | BC049839              | NP_006625                | 0.62                    |
| 7152  | 8.31E-04 | fcrb2252 | cellular retinoic acid binding protein 1 (CRABP1), mRNA /cds=(75,488) /gb=NM_004378 /gi=4758051 /ug=Hs.346950 /len=735   | NM_004378             | NP_877437                | 1.17                    |
| 10107   | 6.37E-04 | seoc2248 | chromosome 20 open reading frame 99 (C20orf99), mRNA   | XM_290958             | NP_006625                | 1.20                    |
| 9857  | 2.51E-04 | fcrc5506 | vesicle-associated membrane protein 5 (myobrevin) (VAMP5), mRNA /cds=(58,408) /gb=NM_006634 /gi=5730111 /ug=Hs.74669 /len=618  | NM_006634             | NP_006625                | 1.26                    |
| 3672  | 2.51E-04 | fcrb7072 | cDNA PSEC0152 fis, clone PLACE1007885. /cds=(20,1144) /gb=AK075459 /gi=22761560 /ug=Hs.350475 /len=2130  | AK075459              | BAC11634                 | 1.34                    |